



CALIFORNIA CLIMATE ACTION TEAM

MEDIA RELEASE

FOR IMMEDIATE RELEASE:
April 1, 2009

Contact: BreAnda Northcutt, Cal/EPA, 916/324-9670
Alicia McGee, Natural Resources, 916/651-7585
See below for add'l contacts

Report Consolidates New Compelling Research on Impacts of Climate Change on California

Governor's Climate Action Team releases draft biennial report

SACRAMENTO, Calif. – A biennial report released today by the Climate Action Team (CAT) suggests that without action, severe and costly climate change impacts are possible across California. The report uses updated, comprehensive scientific research to outline environmental and economic climate impacts.

“The Climate Action Team plays an essential role in the implementation of the state's climate initiatives and is guided by these important technical studies to ensure policy decisions are based on sound science,” said Linda Adams, Secretary for Environmental Protection and Chair of the state's CAT. “Any delay in fighting global warming would be detrimental to our economic stability – costing us billions of dollars and dampening the state's most important economic sectors. Taking immediate action on climate change is essential to slow the projected rate of warming. We also need to make smarter decisions in order to anticipate and adapt to the changes.”

The CAT report, now available for public comment, synthesizes 37 research papers written by world-class scientists from prominent universities and research institutions. Three additional papers are still undergoing peer reviews and will be considered for inclusion in the final report later this summer. The reports were funded, in part, through the California Energy Commission's Public Interest Energy Research (PIER) program and represent the most comprehensive and detailed scientific information to date on climate change impacts to California.

The research papers also serve as the scientific foundation on which the state is developing its first Climate Adaptation Strategy (CAS), and a chapter of the CAT report previews this work. Understanding that adaptation and mitigation must complement each other in the fight against climate change, Gov. Schwarzenegger signed a directive in November 2008 tasking the Natural Resources Agency with developing a CAS. When complete, this comprehensive effort will improve coordination within state government and more effectively plan for climate impacts from sea level rise, increased temperatures, shifting precipitation and extreme weather events.

“Delay in preparing for climate change is not an option,” said Energy Commission Vice Chair James Boyd. “Based on the best and most current science, these new scenarios used in the CAT report will help California plan and manage against the potential impacts of a changing climate.”

The technical papers analyze such research areas as the impacts of sea level rise, higher temperatures, increased wildfires, decreased water supplies, increased energy demand, among others, on the state's environment, industries and economic prosperity. Each of the papers has or will undergo peer review by technical experts in private, public and governmental entities.

"The assessment finds an even stronger set of vulnerabilities to climate change than we found two years ago" said Dan Cayan, a member of the California Climate Assessment Steering Team and a climate researcher at Scripps Institution of Oceanography at UC San Diego and the U.S. Geological Survey. "This underscores the need for careful, continued monitoring of the natural and societal environment in California and heightens the imperative to sharpen our modeling tools to provide regional projections that can be evaluated by state policymakers and other decision-makers."

Impacts of climate change to California's coast, agriculture, forest and communities have been known and studied for years; however the studies that support the CAT report suggest that actual greenhouse gas emissions are outstripping 2006 projections. Of particular interest are the several papers focusing on the impacts of a rise in sea levels to coastal communities and increased potential of wildfires to residential areas.

Key Findings:

- **Water Supply Impacts:** A group of researchers at UC Davis investigated the effect of potential climate-induced reductions in water supply to the agricultural sector. One of their findings is that the lack of water would result in reductions in irrigated crop area contributing to the loss of agricultural lands in the Central Valley. Under the particular climate change scenario investigated, the researchers also found that changes in yields (mostly negative) and changes in water availability could result in gross revenues losses of up to 3 billion dollars by year 2050. (*Source: Effect of Climate Change on Field Crop Production in the Central Valley of California; California Perennial Crops in a Changing Climate; Estimating the Economic Impacts of Agricultural Yield Related Changes for California*)
- **Electricity Demand Impacts:** To estimate potential impacts of climate change on electricity demand for the residential sector, researchers at UC Berkeley used a comprehensive household level billing data set for California. This highly detailed study found much larger effects of climate change on electricity demand than previous studies. Statewide electricity demand may increase by up to 55 percent by the end of the century. However, policies aimed at reducing the weather sensitivity of demand can play a large role in reducing future electricity demand. (*Source: Impact of Climate Change on Residential Electricity Consumption*)
- **Wildfire Risks:** Scientists at the UC Merced and Pardee RAND Graduate School performed a novel analysis of wildfire risk in California. They estimated that wildfire risk would increase throughout the end of the century. Average annual monetary impacts due to home loss may plausibly be on the order of 2 billion dollars per year by mid-century and up to 14 billion dollars per year by the end of the century. (*Source: Climate Change, Growth, and California Wildfire; Potential Effects of Climate Change on Residential Wildfire Risk in California*)
- **Ecosystem Impacts:** The Nature Conservancy's research has determined that California's historic ranching culture, and a source of local, grass-fed beef, is at significant risk from climate change. (*Source: The Impact of Climate Change on California's Ecosystem Services*)

To view each of the draft papers and a list of authors, visit www.climatechange.ca.gov/publications/cat/.

About the California Climate Action Team (CAT):

The CAT plays an essential role in the state's efforts to combat climate change. The CAT supports the implementation of the Scoping Plan – the state's roadmap to reach the greenhouse gas reduction goals required in the Global Warming Solutions Act of 2006, or AB 32. This plan calls for ambitious but achievable reduction in California's carbon footprint – toward a clean energy future. The CAT also supports the development of a statewide adaptation strategy to help anticipate and respond to the potential environmental and economic impacts of climate change.

The CAT is made up of representatives from 16 state departments and agencies including: Air Resources Board; Business, Transportation and Housing Agency; California Department of Transportation; California Environmental Protection Agency; California Department of Forestry and Fire Protection; California Department of Food and Agriculture; California Energy Commission; California Integrated Waste Management Board; California Public Utilities Commission; Department of Water Resources; Governor's Office of Planning and Research; Department of Public Health; Natural Resources Agency; State and Consumer Services Agency—Department of General Services; Department of Parks and Recreation; and the State Water Resources Control Board.

About the Public Interest Energy Research (PIER) Program:

The Energy Commission's Public Interest Energy Research (PIER) program supports public interest energy research and development that helps improve the quality of life in California by bringing environmentally safe, affordable and reliable energy services and products to the marketplace. The program leads the state in funding coordinated science programs with the best information in the world, particularly for climate impacts.

-30-

Climate Action Team media contacts:

California Environmental Protection Agency: BreAnda Northcutt, 916/324-9670

Air Resources Board: Stanley Young, 916/322-2990

Integrated Waste Management Board: Jon Myers, 916/445-1296

State Water Board: William Rukeyser, 916/341-5254

Business, Transportation & Housing Agency: Michael Bowman, 916/323-5416

Department of Transportation: Mark DeSio, 916/654-5782

California Public Utilities Commission: Terrie Prosper, 415/703-1366

Department of Food and Agriculture: Steve Lyle, 916/654-0462

Health and Human Services Agency: Suanne Buggy, 916/654-3304

Natural Resources Agency: Sandy Cooney, 916/653-9402

Department of Conservation: Ed Wilson, 916/323-1886

Department of Forestry and Fire Protection: Janet Upton, 916/653-5587

Department of Water Resources: Amy Norris, 916/654-3755

Energy Commission: Susanne Garfield, 916/654-4989

State and Consumer Services Agency: Ken Hunt, 916/376-5007